

## **FCC Appendix RF Test Data for 2.4GWIFI**

**FCC ID** : 2A7TD-MG5

**Company** : Shenzhen Weipai IOT Intelligent Technology Co., LTD

**EUT** : Battery camera

**Model Number** : MG5

**Report No.** : CTA26080600501

**Reviewed By** : Eric Wang

## Appendix A: DTS Bandwidth

### Test Result

| TestMode  | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|-----------|---------|----------------|--------------|----------|----------|------------|---------|
| 11B       | Ant1    | 2412           | 10.200       | 2406.920 | 2417.120 | 0.5        | PASS    |
|           |         | 2437           | 10.240       | 2431.920 | 2442.160 | 0.5        | PASS    |
|           |         | 2462           | 10.200       | 2456.920 | 2467.120 | 0.5        | PASS    |
| 11G       | Ant1    | 2412           | 15.680       | 2404.320 | 2420.000 | 0.5        | PASS    |
|           |         | 2437           | 15.840       | 2429.080 | 2444.920 | 0.5        | PASS    |
|           |         | 2462           | 15.760       | 2454.120 | 2469.880 | 0.5        | PASS    |
| 11N20SISO | Ant1    | 2412           | 17.000       | 2403.400 | 2420.400 | 0.5        | PASS    |
|           |         | 2437           | 17.040       | 2428.440 | 2445.480 | 0.5        | PASS    |
|           |         | 2462           | 16.480       | 2454.120 | 2470.600 | 0.5        | PASS    |
| 11N40SISO | Ant1    | 2422           | 35.040       | 2404.960 | 2440.000 | 0.5        | PASS    |
|           |         | 2437           | 35.840       | 2419.240 | 2455.080 | 0.5        | PASS    |
|           |         | 2452           | 36.160       | 2434.000 | 2470.160 | 0.5        | PASS    |

## Test Graphs

11B\_Ant1\_2412



11B\_Ant1\_2437



11B\_Ant1\_2462



11G\_Ant1\_2412



11G\_Ant1\_2437



# 11G\_Ant1\_2462



# 11N20SISO\_Ant1\_2412



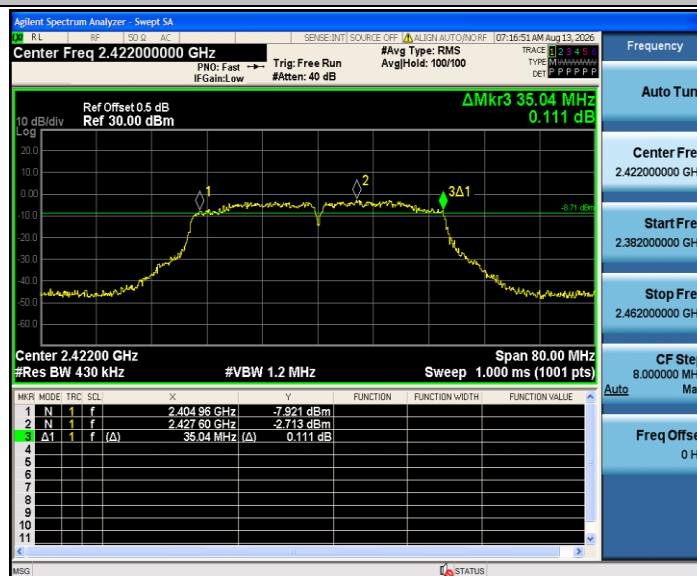
# 11N20SISO\_Ant1\_2437



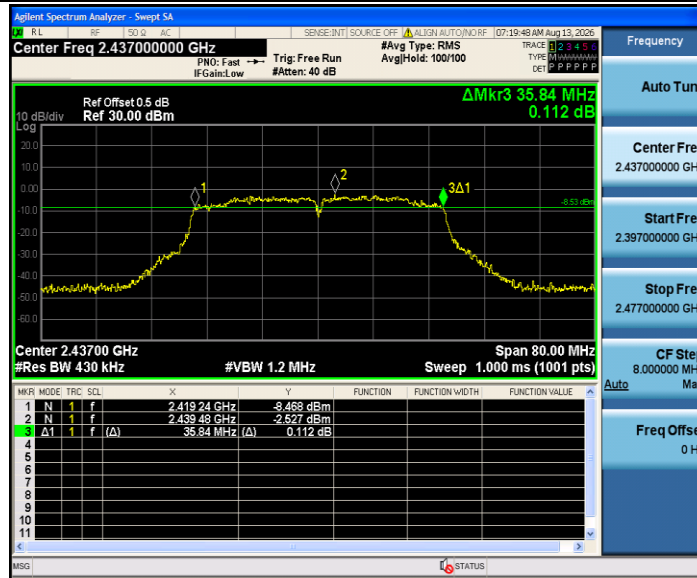
11N20SISO\_Ant1\_2462



11N40SISO\_Ant1\_2422



# 11N40SISO\_Ant1\_2437



# 11N40SISO\_Ant1\_2452



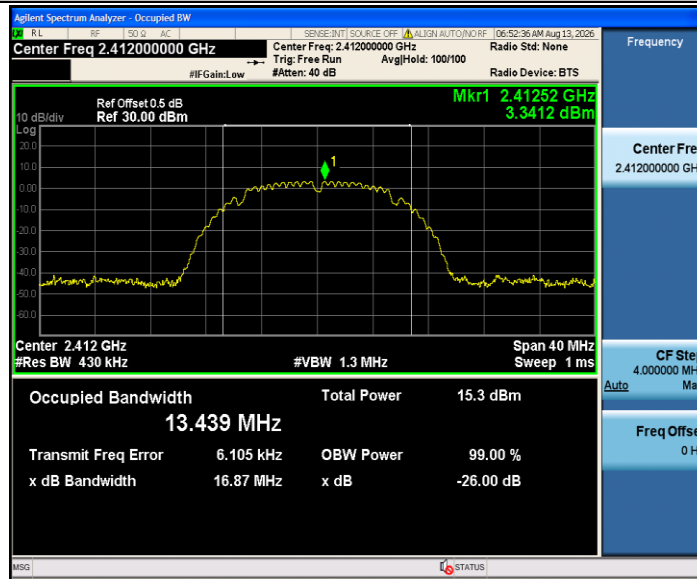
## Appendix B: Occupied Channel Bandwidth

### Test Result

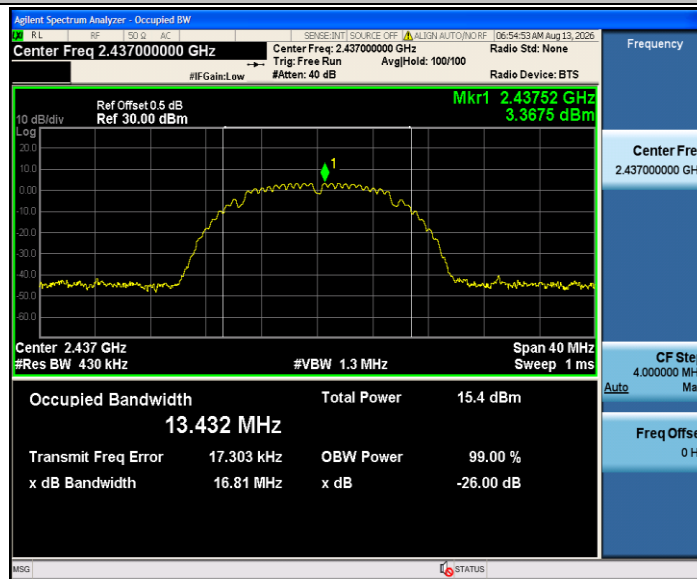
| TestMode  | Antenna | Channel<br>Frequency[MHz] | OCB<br>[MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|-----------|---------|---------------------------|--------------|-----------|-----------|------------|---------|
| 11B       | Ant1    | 2412                      | 13.439       | 2405.2866 | 2418.7256 | ---        | ---     |
|           |         | 2437                      | 13.432       | 2430.3013 | 2443.7333 | ---        | ---     |
|           |         | 2462                      | 13.426       | 2455.3097 | 2468.7357 | ---        | ---     |
| 11G       | Ant1    | 2412                      | 16.783       | 2403.6530 | 2420.4360 | ---        | ---     |
|           |         | 2437                      | 16.801       | 2428.6273 | 2445.4283 | ---        | ---     |
|           |         | 2462                      | 16.808       | 2453.6454 | 2470.4534 | ---        | ---     |
| 11N20SISO | Ant1    | 2412                      | 17.960       | 2403.0234 | 2420.9834 | ---        | ---     |
|           |         | 2437                      | 17.915       | 2428.1046 | 2446.0196 | ---        | ---     |
|           |         | 2462                      | 17.831       | 2453.1005 | 2470.9315 | ---        | ---     |
| 11N40SISO | Ant1    | 2422                      | 36.043       | 2404.1481 | 2440.1911 | ---        | ---     |
|           |         | 2437                      | 36.019       | 2419.1398 | 2455.1588 | ---        | ---     |
|           |         | 2452                      | 36.126       | 2434.0965 | 2470.2225 | ---        | ---     |

## Test Graphs

11B\_Ant1\_2412



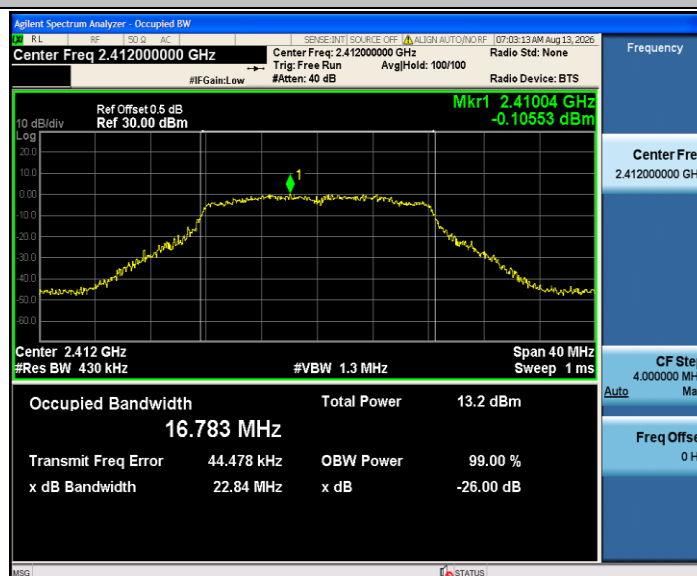
11B\_Ant1\_2437



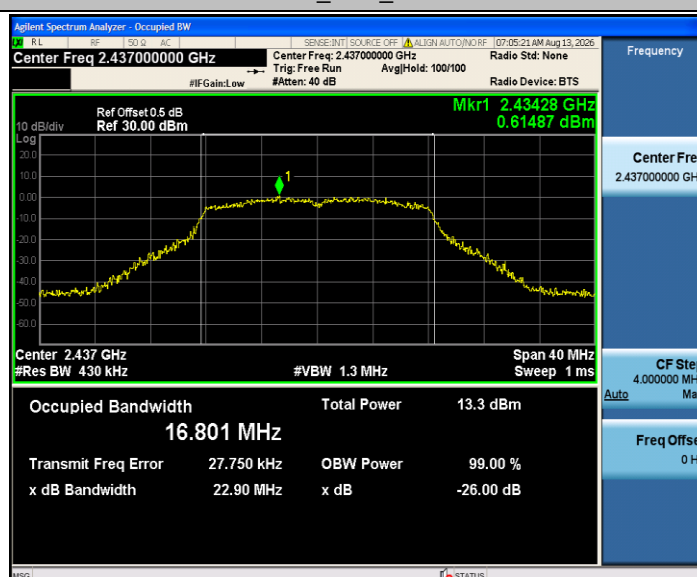
11B\_Ant1\_2462



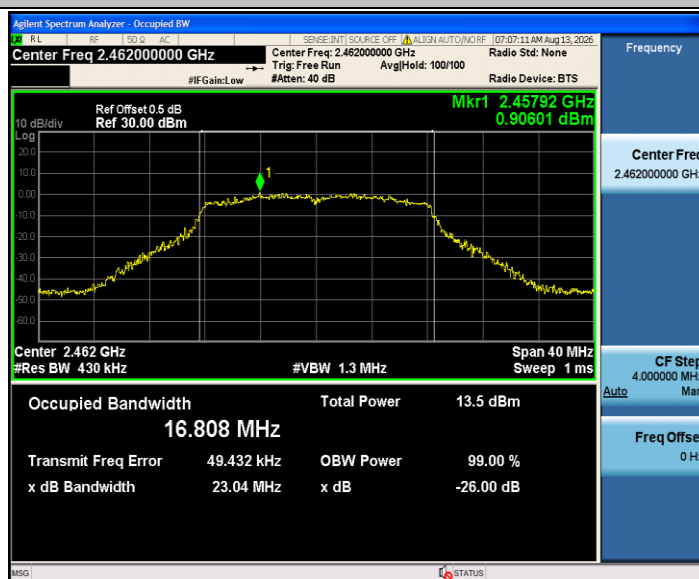
11G\_Ant1\_2412



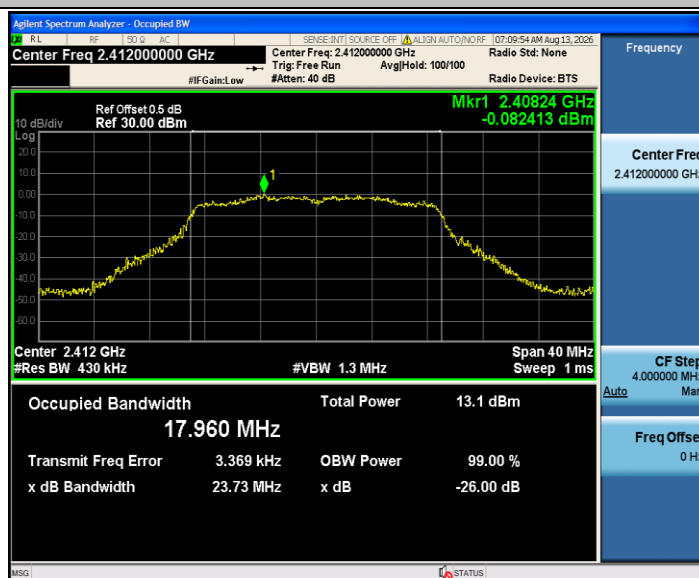
11G\_Ant1\_2437



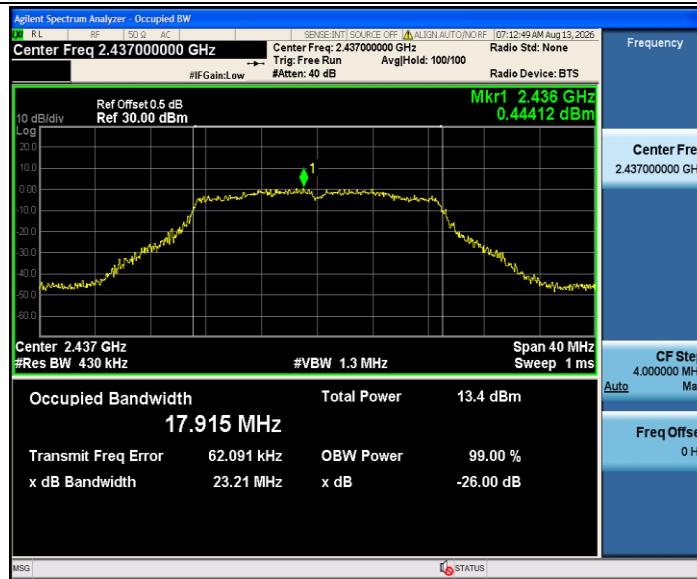
# 11G\_Ant1\_2462



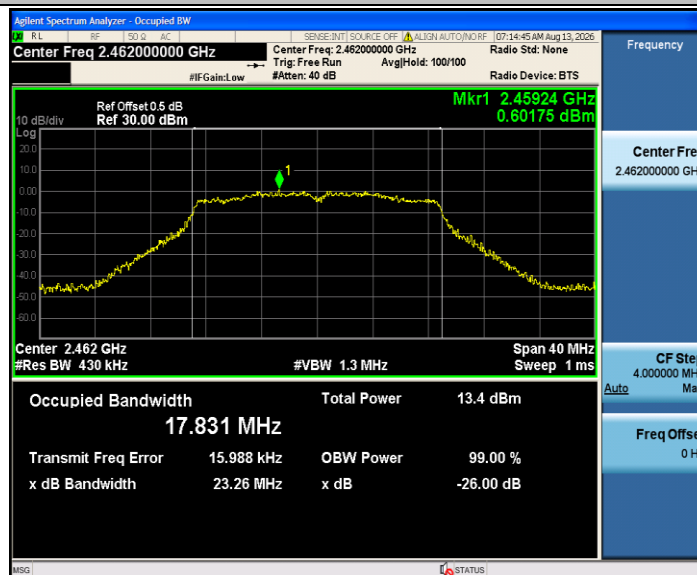
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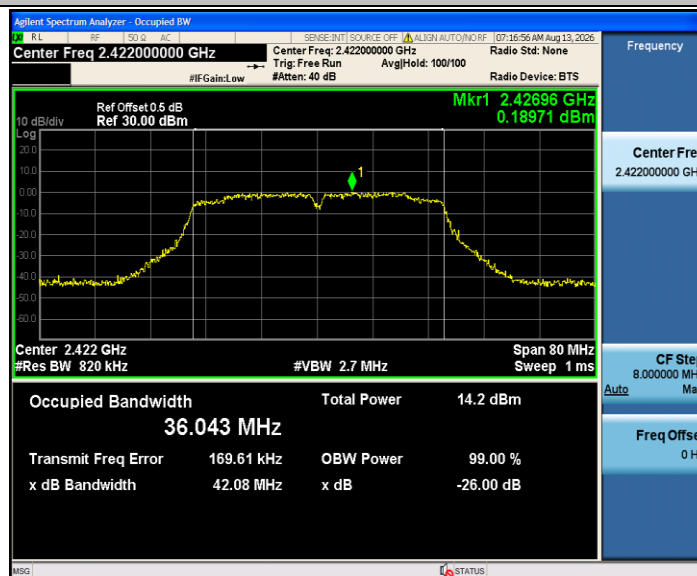
# 11N20SISO\_Ant1\_2437



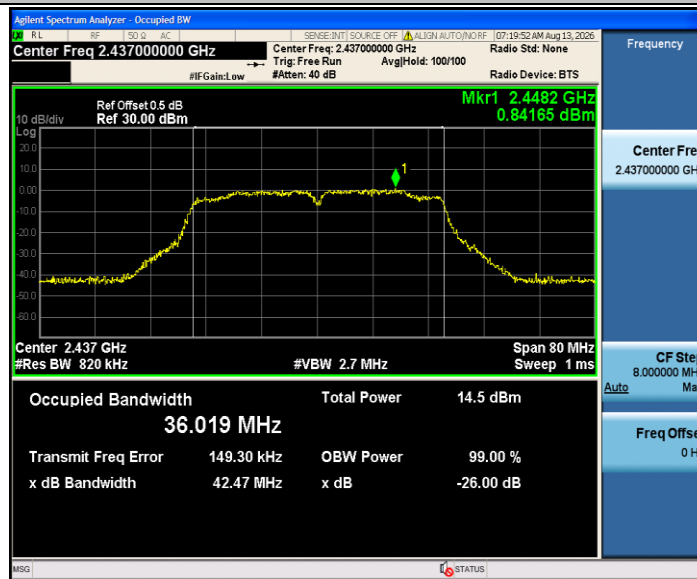
11N20SISO\_Ant1\_2462



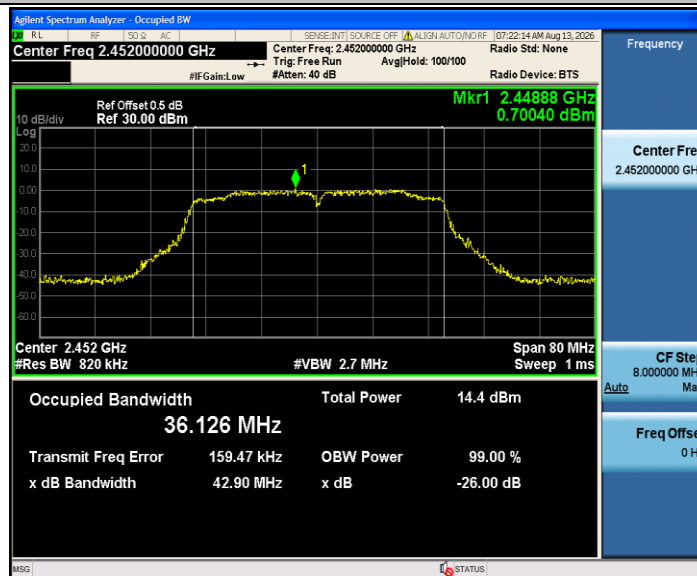
11N40SISO\_Ant1\_2422



# 11N40SISO\_Ant1\_2437



# 11N40SISO\_Ant1\_2452



## Appendix C: Maximum conducted output power

### Test Result

| Test Mode | Antenna | Frequency[MHz] | Result [dBm] | Limit [dBm] | Verdict |
|-----------|---------|----------------|--------------|-------------|---------|
| 11B       | Ant1    | 2412           | 14.89        | ≤30.00      | PASS    |
|           |         | 2437           | 15.11        | ≤30.00      | PASS    |
|           |         | 2462           | 15.23        | ≤30.00      | PASS    |
| 11G       | Ant1    | 2412           | 14.17        | ≤30.00      | PASS    |
|           |         | 2437           | 14.25        | ≤30.00      | PASS    |
|           |         | 2462           | 14.53        | ≤30.00      | PASS    |
| 11N20SISO | Ant1    | 2412           | 14.05        | ≤30.00      | PASS    |
|           |         | 2437           | 14.15        | ≤30.00      | PASS    |
|           |         | 2462           | 14.27        | ≤30.00      | PASS    |
| 11N40SISO | Ant1    | 2422           | 14.36        | ≤30.00      | PASS    |
|           |         | 2437           | 14.60        | ≤30.00      | PASS    |
|           |         | 2452           | 14.61        | ≤30.00      | PASS    |

## Appendix D: Maximum power spectral density

### Test Result

| TestMode  | Antenna | Frequency[MHz] | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|-----------|---------|----------------|----------------------|-----------------|---------|
| 11B       | Ant1    | 2412           | -11.10               | ≤8.00           | PASS    |
|           |         | 2437           | -11.26               | ≤8.00           | PASS    |
|           |         | 2462           | -10.42               | ≤8.00           | PASS    |
| 11G       | Ant1    | 2412           | -17.75               | ≤8.00           | PASS    |
|           |         | 2437           | -17.57               | ≤8.00           | PASS    |
|           |         | 2462           | -16.75               | ≤8.00           | PASS    |
| 11N20SISO | Ant1    | 2412           | -17.38               | ≤8.00           | PASS    |
|           |         | 2437           | -17.38               | ≤8.00           | PASS    |
|           |         | 2462           | -16.60               | ≤8.00           | PASS    |
| 11N40SISO | Ant1    | 2422           | -20.45               | ≤8.00           | PASS    |
|           |         | 2437           | -19.43               | ≤8.00           | PASS    |
|           |         | 2452           | -19.63               | ≤8.00           | PASS    |

## Test Graphs

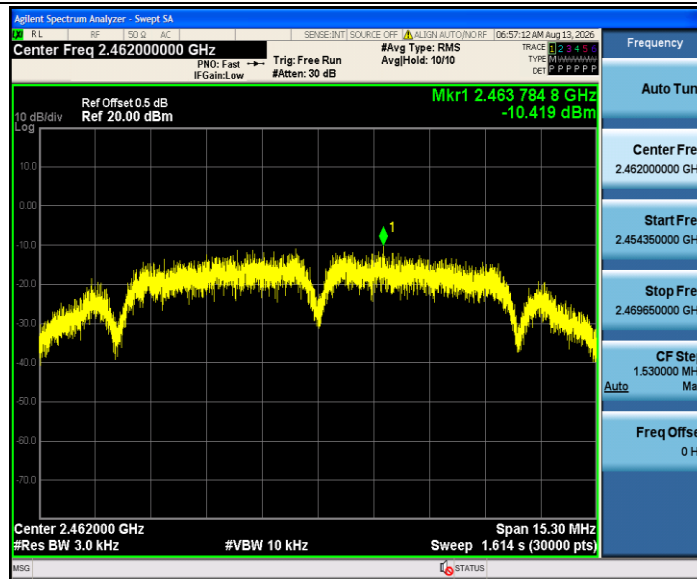
11B\_Ant1\_2412



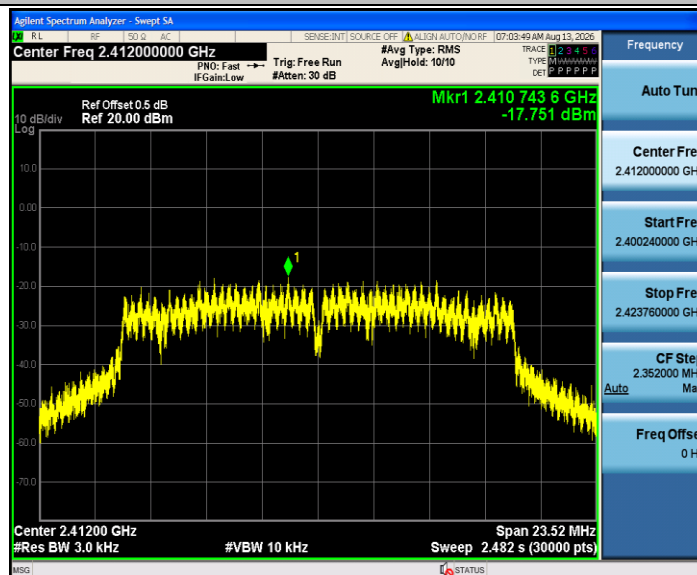
11B\_Ant1\_2437



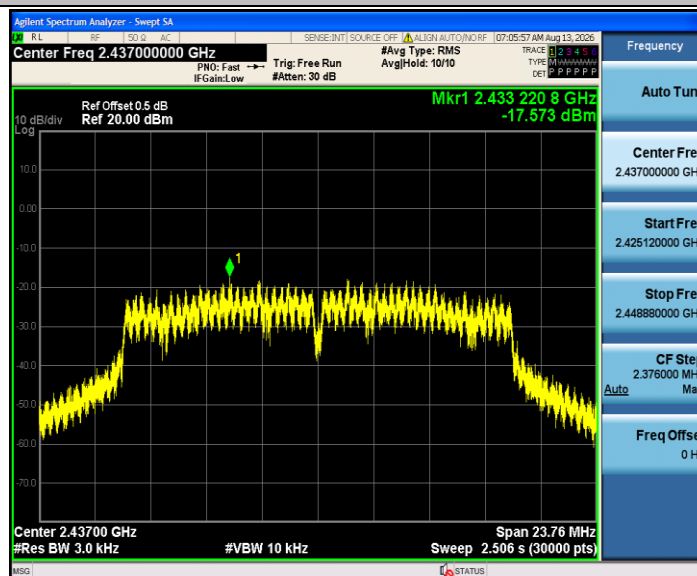
11B\_Ant1\_2462



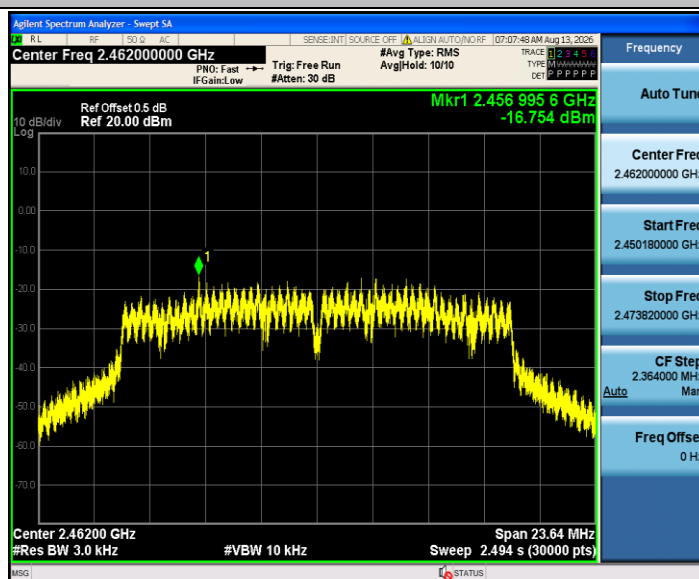
11G\_Ant1\_2412



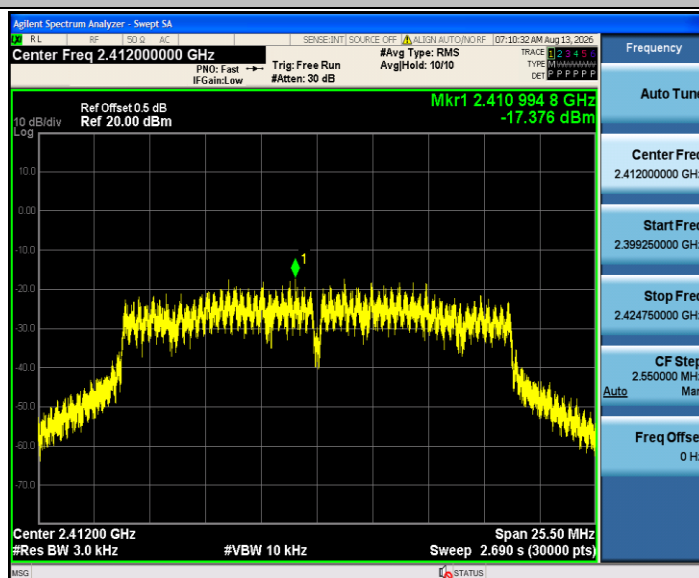
11G\_Ant1\_2437



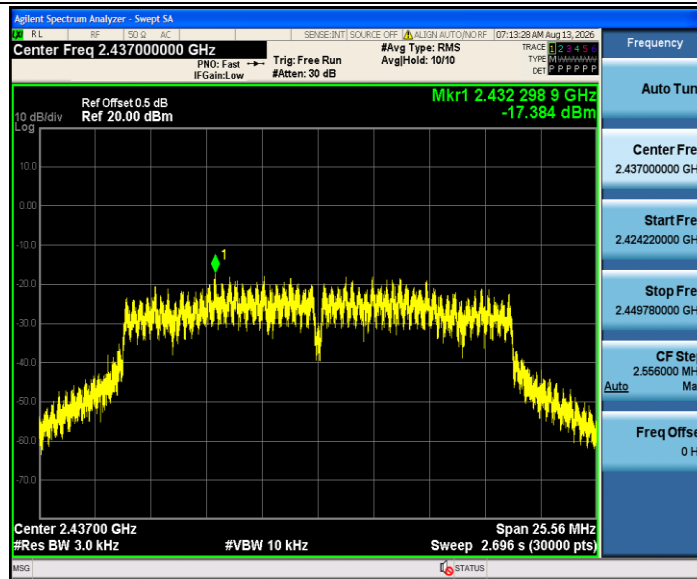
# 11G\_Ant1\_2462



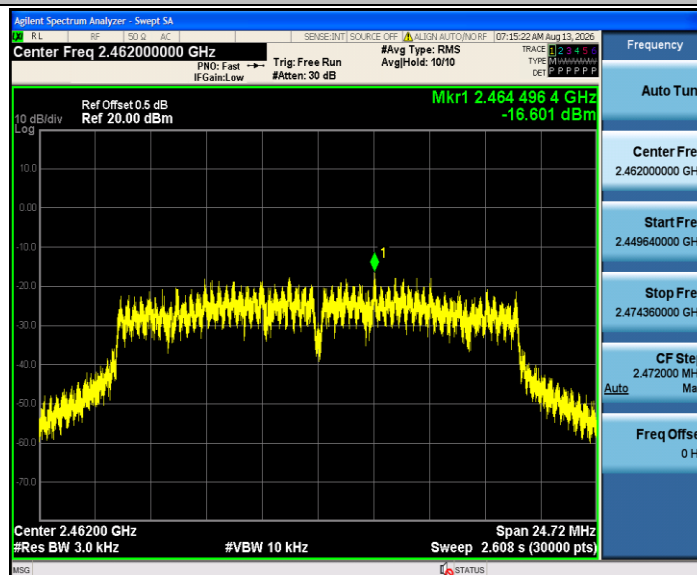
# 11N20SISO\_Ant1\_2412



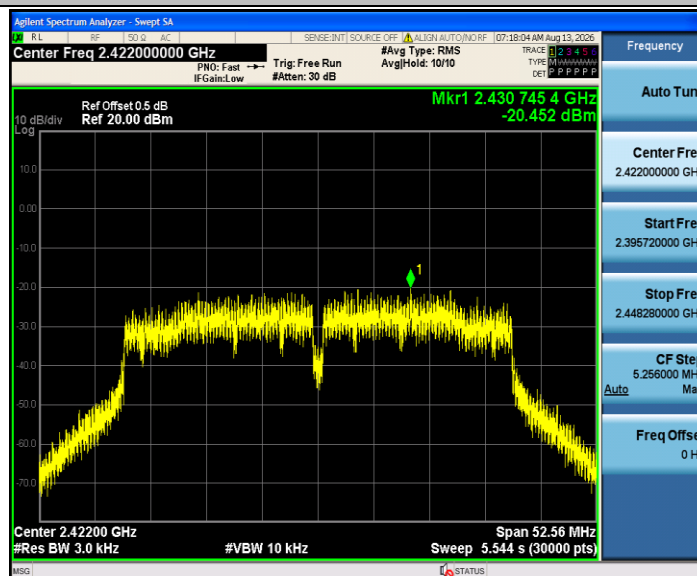
# 11N20SISO\_Ant1\_2437



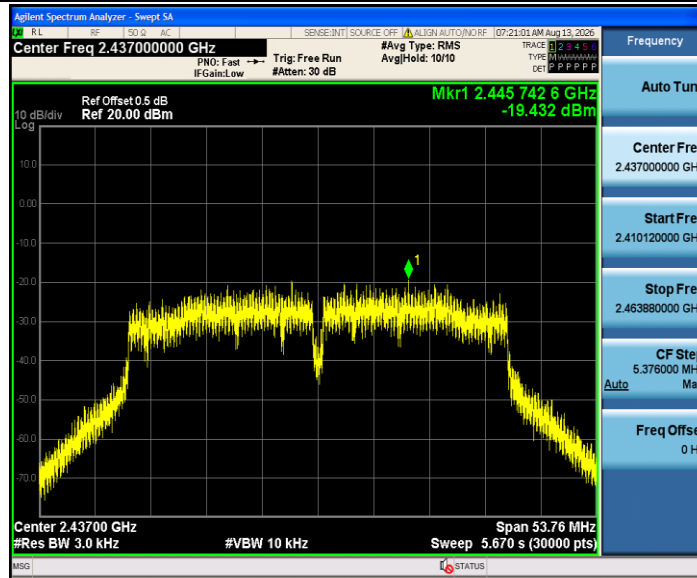
11N20SISO\_Ant1\_2462



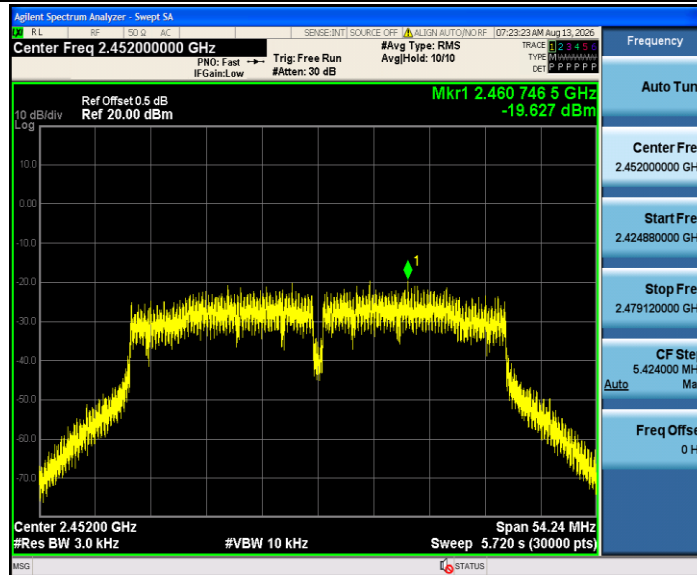
11N40SISO\_Ant1\_2422



# 11N40SISO\_Ant1\_2437



# 11N40SISO\_Ant1\_2452



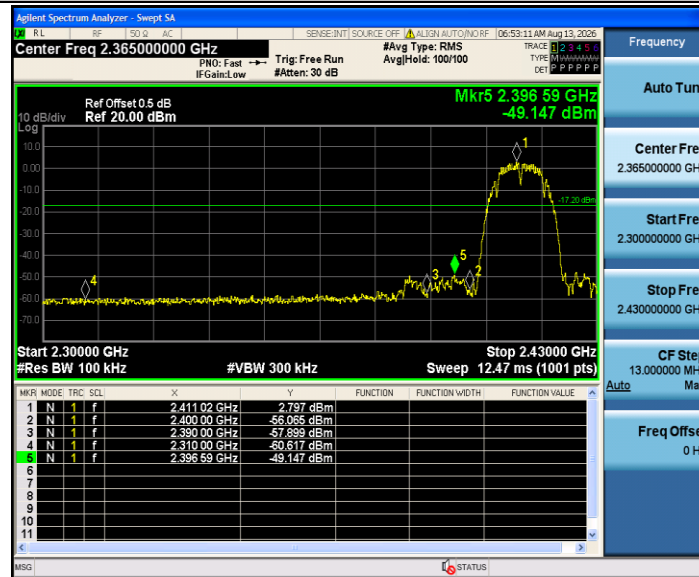
## Appendix E: Band edge measurements

### Test Result

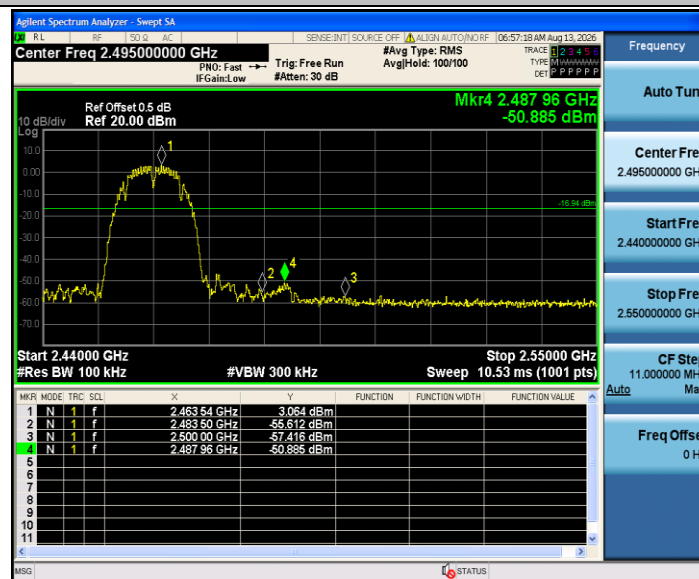
| TestMode  | Antenna | Channel Name | Frequency[MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|--------------|----------------|---------------|-------------|------------|---------|
| 11B       | Ant1    | Low          | 2412           | 2.80          | -49.15      | ≤-17.2     | PASS    |
|           |         | High         | 2462           | 3.06          | -50.89      | ≤-16.94    | PASS    |
| 11G       | Ant1    | Low          | 2412           | -2.52         | -34.64      | ≤-22.52    | PASS    |
|           |         | High         | 2462           | -1.99         | -57.96      | ≤-21.99    | PASS    |
| 11N20SISO | Ant1    | Low          | 2412           | -2.43         | -33.7       | ≤-22.43    | PASS    |
|           |         | High         | 2462           | -2.04         | -57.89      | ≤-22.04    | PASS    |
| 11N40SISO | Ant1    | Low          | 2422           | -5.50         | -33.75      | ≤-25.5     | PASS    |
|           |         | High         | 2452           | -5.21         | -56.37      | ≤-25.21    | PASS    |

## Test Graphs

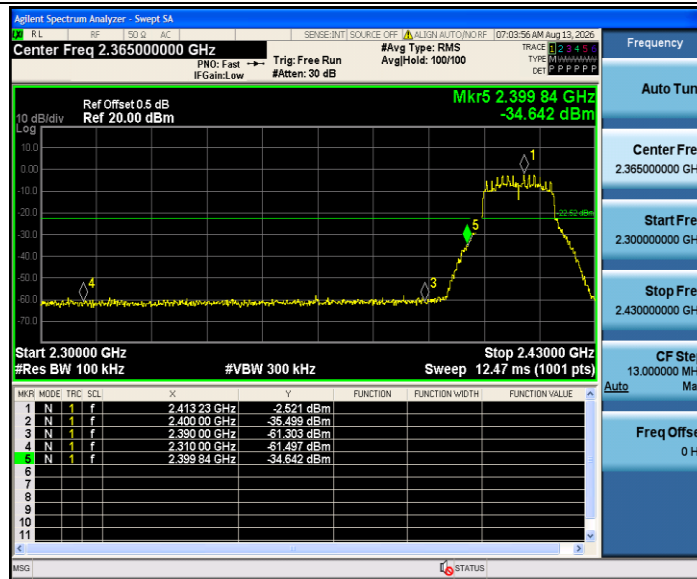
11B\_Ant1\_Low\_2412



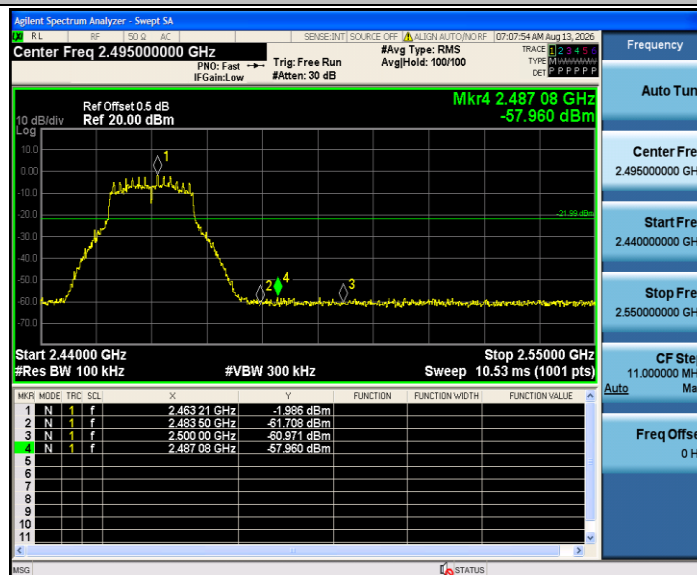
11B\_Ant1\_High\_2462



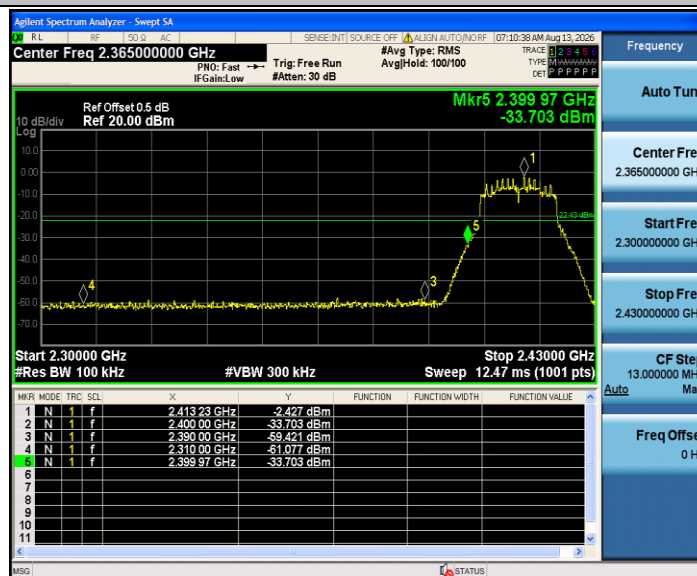
11G\_Ant1\_Low\_2412



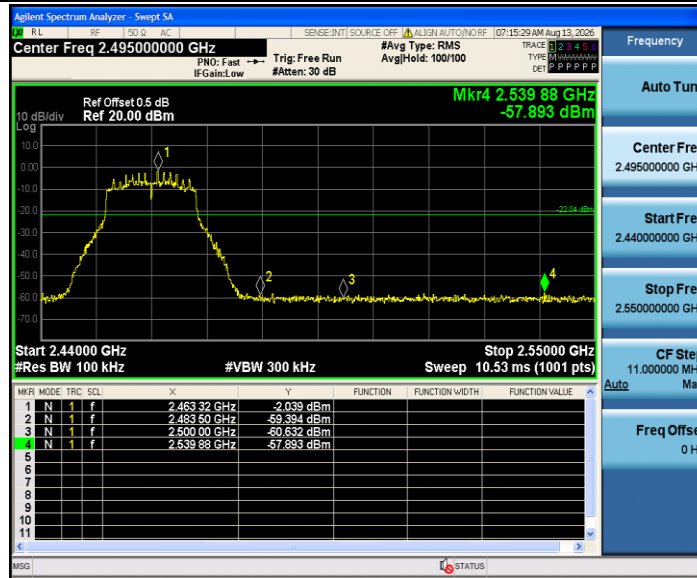
11G\_Ant1\_High\_2462



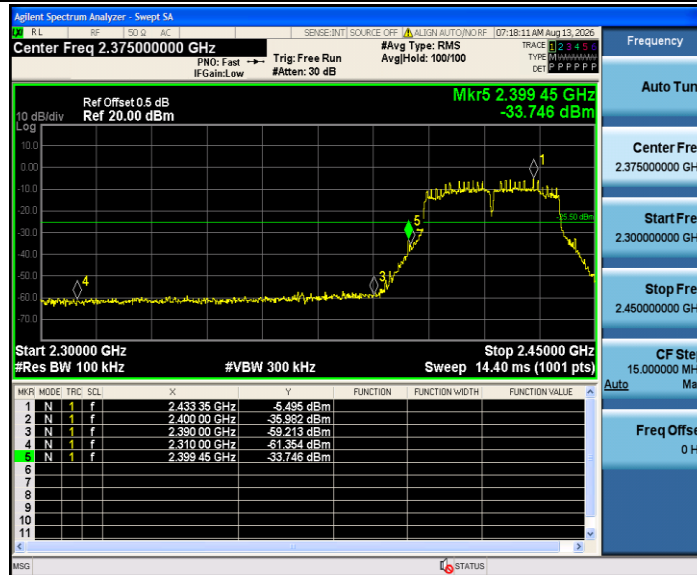
11N20SISO\_Ant1\_Low\_2412



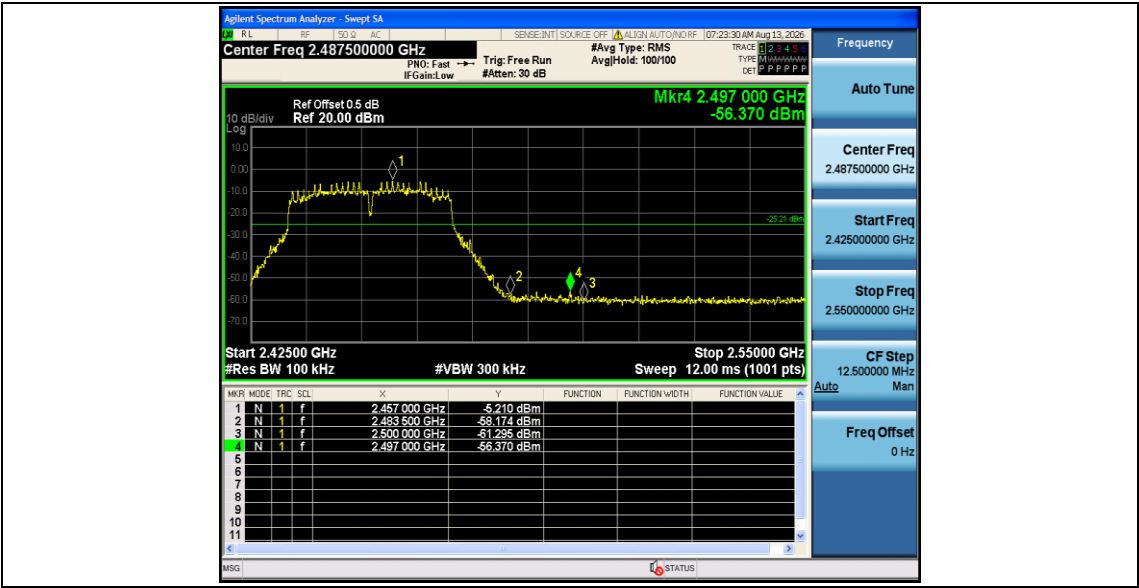
# 11N20SISO\_Ant1\_High\_2462



# 11N40SISO\_Ant1\_Low\_2422



# 11N40SISO\_Ant1\_High\_2452



## Appendix F: Conducted Spurious Emission

### Test Result

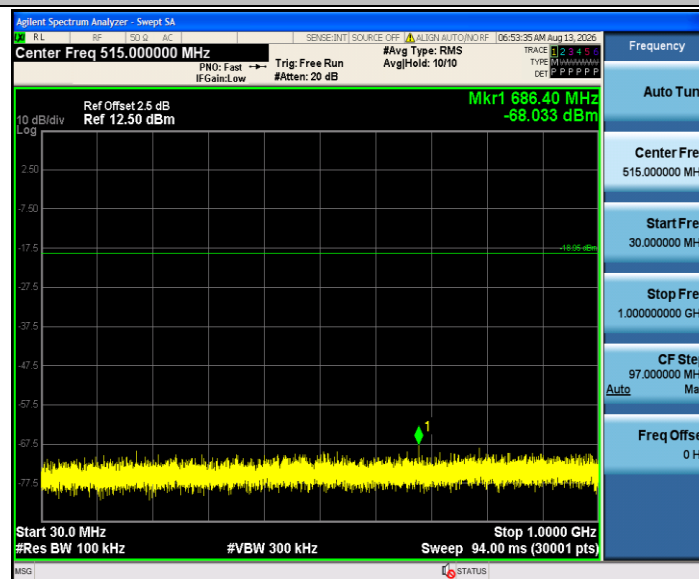
| TestMode  | Antenna | Frequency[MHz] | FreqRange [Mhz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|-----------|---------|----------------|-----------------|----------------|--------------|-------------|---------|
| 11B       | Ant1    | 2412           | Reference       | 1.05           | 1.05         | ---         | PASS    |
|           |         |                | 30~1000         | 1.05           | -68.03       | ≤-18.95     | PASS    |
|           |         |                | 1000~26500      | 1.05           | -46.66       | ≤-18.95     | PASS    |
|           |         | 2437           | Reference       | 1.70           | 1.70         | ---         | PASS    |
|           |         |                | 30~1000         | 1.70           | -68.17       | ≤-18.3      | PASS    |
|           |         |                | 1000~26500      | 1.70           | -46.57       | ≤-18.3      | PASS    |
|           |         | 2462           | Reference       | 1.88           | 1.88         | ---         | PASS    |
|           |         |                | 30~1000         | 1.88           | -69.14       | ≤-18.12     | PASS    |
|           |         |                | 1000~26500      | 1.88           | -46.8        | ≤-18.12     | PASS    |
| 11G       | Ant1    | 2412           | Reference       | -2.90          | -2.90        | ---         | PASS    |
|           |         |                | 30~1000         | -2.90          | -68.92       | ≤-22.9      | PASS    |
|           |         |                | 1000~26500      | -2.90          | -46.22       | ≤-22.9      | PASS    |
|           |         | 2437           | Reference       | -3.15          | -3.15        | ---         | PASS    |
|           |         |                | 30~1000         | -3.15          | -68.48       | ≤-23.15     | PASS    |
|           |         |                | 1000~26500      | -3.15          | -45.59       | ≤-23.15     | PASS    |
|           |         | 2462           | Reference       | -2.32          | -2.32        | ---         | PASS    |
|           |         |                | 30~1000         | -2.32          | -68.8        | ≤-22.32     | PASS    |
|           |         |                | 1000~26500      | -2.32          | -46.1        | ≤-22.32     | PASS    |
| 11N20SISO | Ant1    | 2412           | Reference       | -2.37          | -2.37        | ---         | PASS    |
|           |         |                | 30~1000         | -2.37          | -68.92       | ≤-22.37     | PASS    |
|           |         |                | 1000~26500      | -2.37          | -46.67       | ≤-22.37     | PASS    |
|           |         | 2437           | Reference       | -2.52          | -2.52        | ---         | PASS    |
|           |         |                | 30~1000         | -2.52          | -68.98       | ≤-22.52     | PASS    |
|           |         |                | 1000~26500      | -2.52          | -46.2        | ≤-22.52     | PASS    |
|           |         | 2462           | Reference       | -3.25          | -3.25        | ---         | PASS    |
|           |         |                | 30~1000         | -3.25          | -68.94       | ≤-23.25     | PASS    |
|           |         |                | 1000~26500      | -3.25          | -45.88       | ≤-23.25     | PASS    |
| 11N40SISO | Ant1    | 2422           | Reference       | -5.79          | -5.79        | ---         | PASS    |
|           |         |                | 30~1000         | -5.79          | -68.77       | ≤-25.79     | PASS    |
|           |         |                | 1000~26500      | -5.79          | -46.9        | ≤-25.79     | PASS    |
|           |         | 2437           | Reference       | -5.96          | -5.96        | ---         | PASS    |
|           |         |                | 30~1000         | -5.96          | -68.89       | ≤-25.96     | PASS    |
|           |         |                | 1000~26500      | -5.96          | -45.92       | ≤-25.96     | PASS    |
|           |         | 2452           | Reference       | -5.90          | -5.90        | ---         | PASS    |
|           |         |                | 30~1000         | -5.90          | -68.1        | ≤-25.9      | PASS    |
|           |         |                | 1000~26500      | -5.90          | -45.74       | ≤-25.9      | PASS    |

## Test Graphs

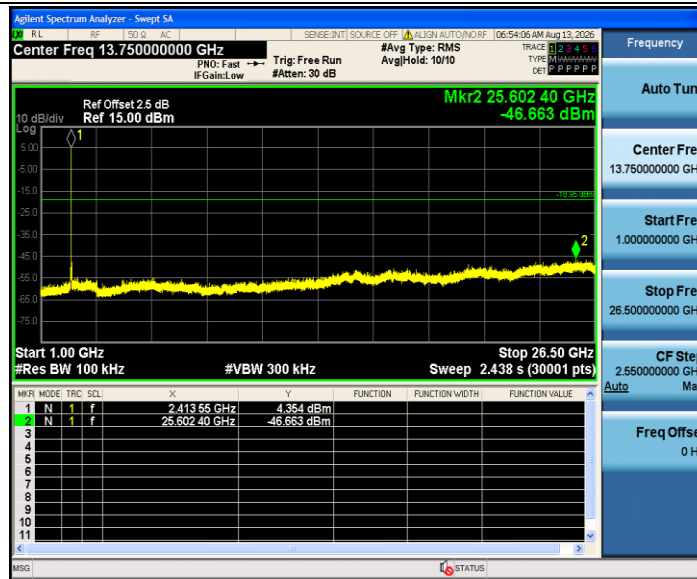
11B\_Ant1\_2412\_0~Reference



11B\_Ant1\_2412\_30~1000



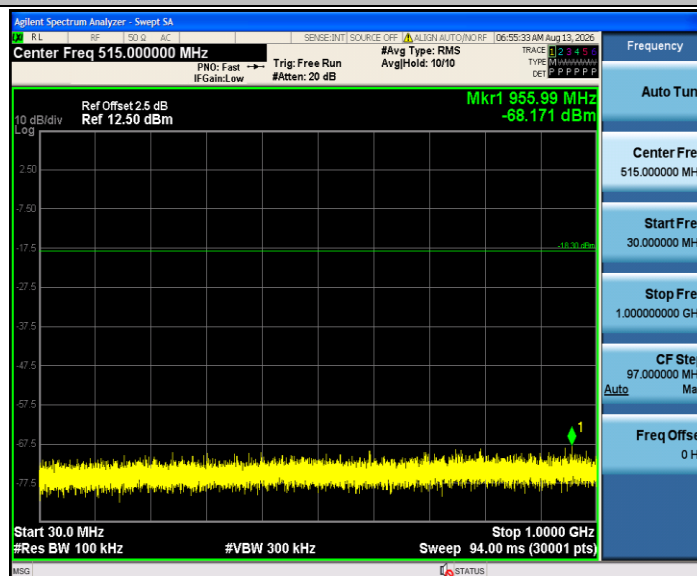
11B\_Ant1\_2412\_1000~26500



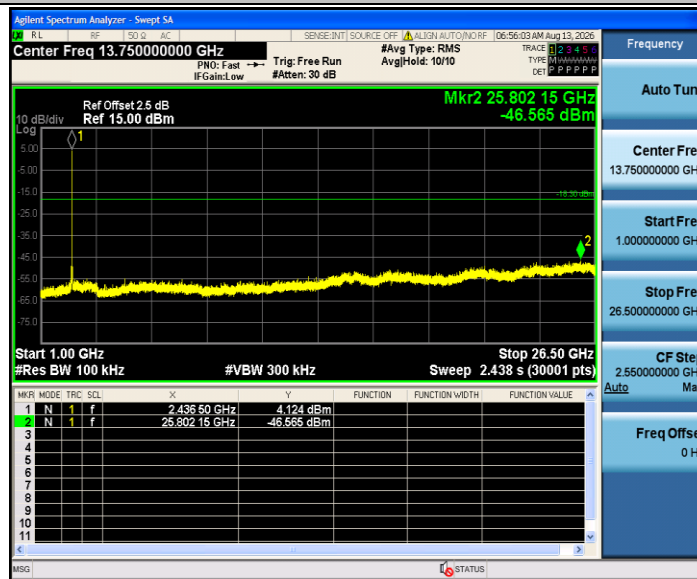
11B\_Ant1\_2437\_0~Reference



11B\_Ant1\_2437\_30~1000



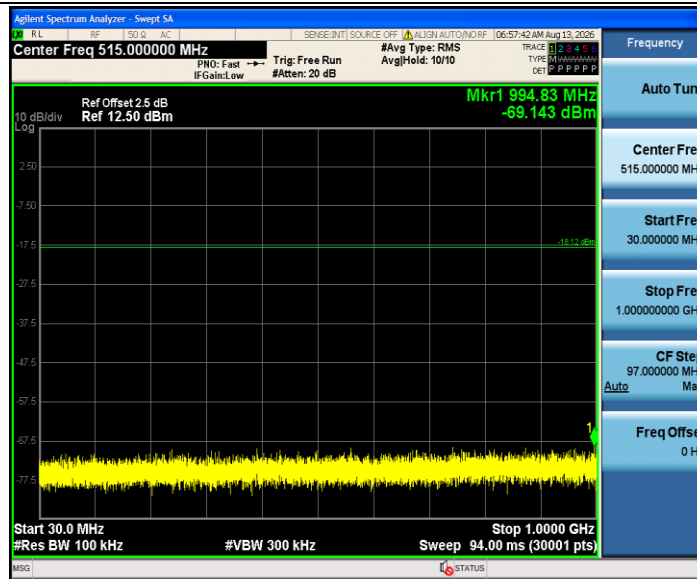
# 11B\_Ant1\_2437\_1000~26500



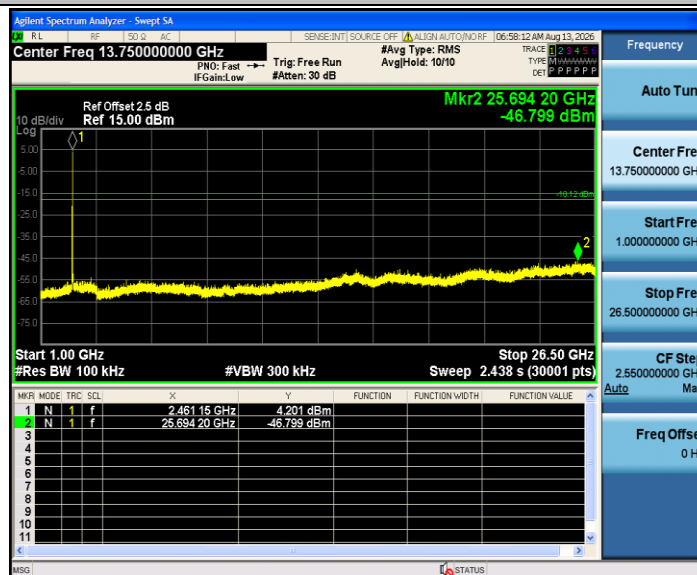
# 11B\_Ant1\_2462\_0~Reference



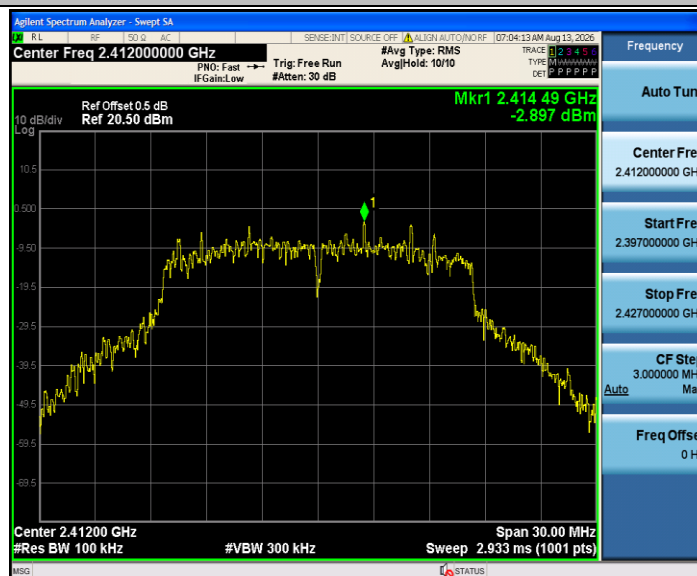
# 11B\_Ant1\_2462\_30~1000



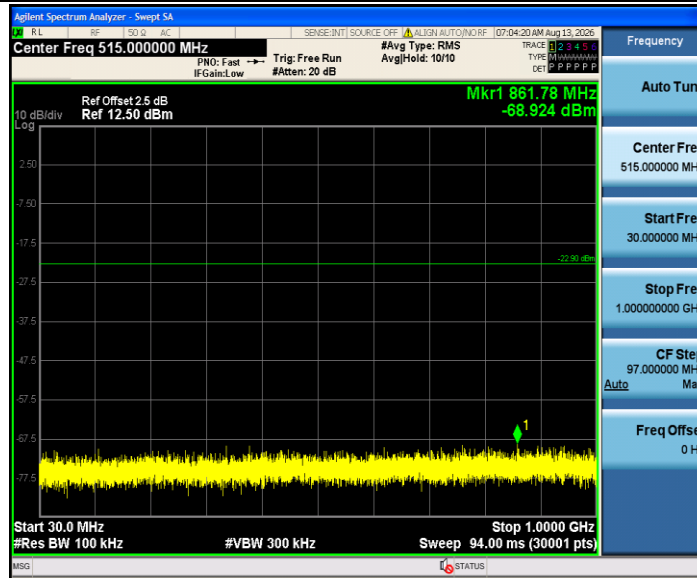
11B\_Ant1\_2462\_1000~26500



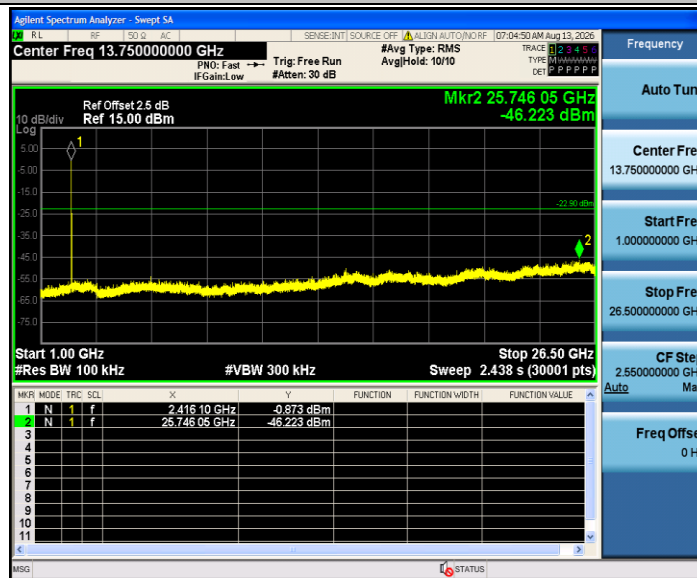
11G\_Ant1\_2412\_0~Reference



# 11G\_Ant1\_2412\_30~1000



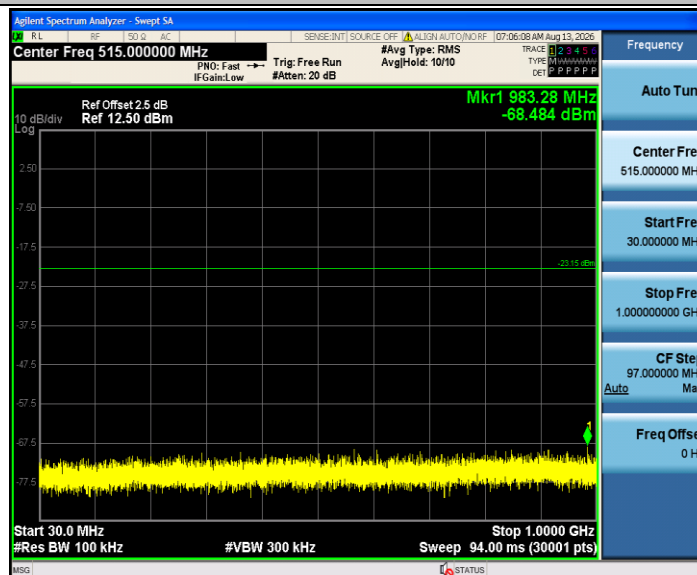
# 11G\_Ant1\_2412\_1000~26500



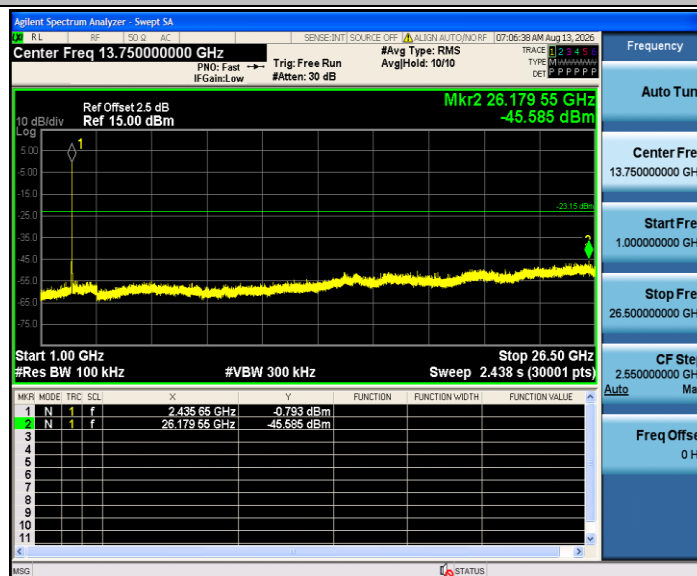
# 11G\_Ant1\_2437\_0~Reference



11G\_Ant1\_2437\_30~1000



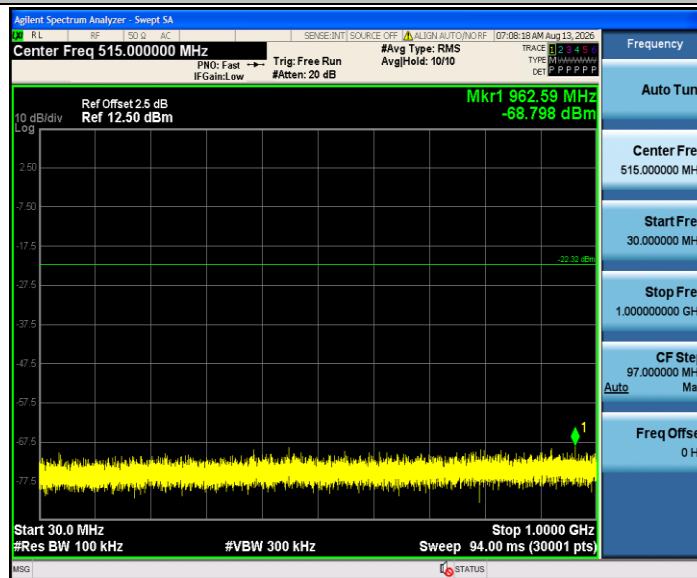
11G\_Ant1\_2437\_1000~26500



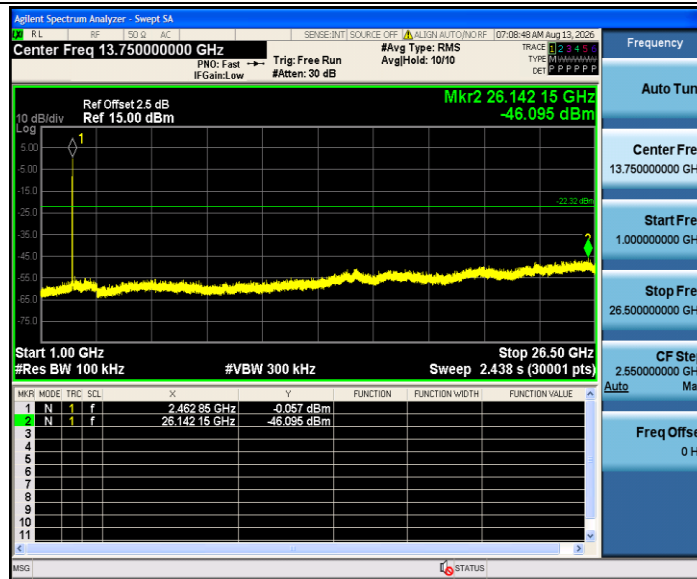
# 11G\_Ant1\_2462\_0~Reference



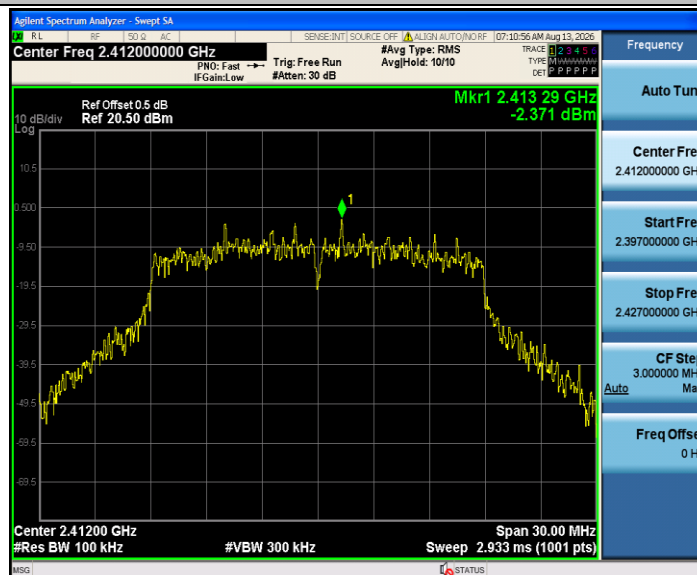
# 11G\_Ant1\_2462\_30~1000



# 11G\_Ant1\_2462\_1000~26500



11N20SISO\_Ant1\_2412\_0~Reference



11N20SISO\_Ant1\_2412\_30~1000

